ABSTRACT OF THE DISCLOSURE

A source signal is provided. The source signal is XORed with a scrambling random signal to generate a scrambled signal. The scrambled signal is transmitted through the digital logic circuit. The scrambled signal is XORed with the descrambling random signal logically identical to the scrambling random signal to produce a descrambled signal identical to the source signal. In one embodiment, the scrambling random signal is transmitted through the digital logic circuit and used as the descrambling random signal. In another embodiment, the scrambling random signal and descrambling random signal are generated independently using pseudo-random number generators. In yet another embodiment, the scrambling random signal is self-synchronizing and is contained within the pattern of the scrambled signal.